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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,016	07/25/2001	Jacques Bourdel		6235

7590

09/25/2002

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EXAMINER

MANOHARAN, VIRGINIA

ART UNIT

PAPER NUMBER

1764

DATE MAILED: 09/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/890,016

Applicant(s)

BOURDEL, JACQUES

Examiner

Virginia Manoharan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 June 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☒ Claim(s) 9-11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 & 5. 6) ☐ Other: \_\_\_\_\_

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\This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors e.g., typographical, grammar, idiomatic, syntax and etc. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The following claimed languages lack antecedent supports in the claims.

1. "...the matter (M)", claim 1, line 6;
2. "... the smooth and hot face (10)..", claim 1, line 7; and
3. "... the zone," claim 3.

b. The following claimed languages such as:

1. "in particular aqueous matter, "claim 1, lines 4-5 and claim 5";
2. "in the form of " claim 1, lines 6-7 and claim 5;
3. "quickly" claims 1& 5;
4. "in particular" claim 4; and
5. "suitable", claim 5,

all fail to ascertain the claimed invention with precision.

c. The term "smooth and hot"; high enough" in claims 1 and 5 are relative terms which render the claims indefinite. The term "smooth and hot" and "high enough"

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are not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Replacing "hot" for e.g., with heated obviates this rejection.

d. The phrase "characterized by the fact", numerous recited in the claims, is not a recitation of positive, manipulative method steps nor is it a recitation of positive structural features of an apparatus claim. Also, the limitations recited prior the "characterized by the fact that" provides for ambiguity and confusion i.e., whether to consider part of applicants' invention or not? The claims should be amended to a Jepson – type- format in accordance with rule 1.75(e) to delineate, that which is considered to be an improvement in the art.

e. The inconsistent used of terminology in the claims is improper. For example only: "matter" in line 2 as opposed to "the material" in line 19 of claim 1.

f. In claim 2, reciting—a factor in the range of 20 to 100—in lieu of "a factor lying in the range of 20 to 100—is better.

Claims 9-11 are objected under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only and/or cannot depend from only other multiple dependent claim. See MPEP § 608.01(n). Accordingly, claims 9-11 have not been further treated on the merits.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bourdel in view of Strashun et al or Morgan et al.

Bowdel discloses a "method of extracting, by evaporation, solid residue in suspension and/or in solution in fluid matter containing volatile substances, in particular aqueous matter, the method comprising:

- a. applying the matter (M) to be treated in the form of a thin layer on the smooth and hot face (10) of a heat exchange wall (1) which is heated to a temperature that is high enough to cause the water and/or other volatile substances contained in the matter to evaporate quickly, said hot wall (1) moving cyclically around a closed path;
- b. crushing the layer of matter (M) against, said hot face (10) to level it and to encourage crumbling and spreading thereof; and
- c. at the end of a cycle, recovering the solid and dry residue (2) that has formed on said hot face by scraping it off"; as claimed in claim 1. Bourdel further discloses the apparatus comprising.

"..a. a heat exchange wall (1) having a smooth and hot face (10) which is heated to a temperature that is high enough to cause the water and/or the other volatile substances contained in the matter to evaporate quickly, said wall being movable cyclically around a closed path;

b. feeder and applicator means (21, 2) for feeding and applying the matter to be treated onto said hot face at the beginning of the cycle in the form of a thin layer;

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c. crushing means (3) suitable for encouraging crumbling and spreading of the layer of matter on said hot face (10); and

d. scraper means (4) operative at the end of the cycle to recover the solid residue (r) that has formed..” as claimed in claim 5. See e.g., the claims in cols. 13-14 and Figs. 1-10. of the Bourdel’s reference. The method and apparatus of Bourdel differs from the claimed invention in that claims 1 and 5 recite the limitations subsequent to “characterized by the fact. However, Strashun et al or Morgan Jr. et al teaches or suggests that the method wherein immediately before applying the material, it is caused to expand greatly in volume so as to give it the consistency of a foam, such that it is the foam which is applied in the form of a thin layer on the hot face is known in the art.; Likewise, Strashun or Morgan further teaches or suggests the apparatus wherein the feeder and applicator means (21, 2) are adapted to cause the matter (M) to expand greatly in volume and to give it the consistency of a foam immediately before it is applied, and to deposit said foam on the hot face (10) in the form of a thin layer are known expediciencies in the art. See the claims at cols. 11-13 of the Strashun et al reference and at col. 3, lines 5-67; the claims at cols. 9-10 of the Morgan Jr. et al reference. To incorporate the above teachings or suggestions to the method and apparatus of Bourdel would have been obvious to one of ordinary skill for the advantage taught e.g., at col. 2, lines 1-15 of Morgan Jr. et al. That is Morgan teaches that “the mass of foams retains this expanded volume with the result that the final product... can be clearly crushed..... The fact that the initial liquid is applied to dehydration in the form of a foam and that the volume thereof is essentially maintained..

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are keys to the formation of the early reconstruction form product... The dehydration takes place rapidly and efficiently because moisture can diffuse readily out of the expanded mass....

Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Sephton discloses a method of flowing foaming mixture over a heat transfer surface.

b. Moss teaches that the foam is beneficial in that it carries with it impurities in a solvent still.

c. Khokhlov et al discloses a foam - type apparatus for effecting heat and mass transfer processes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to V. Manoharan whose telephone number is (703) 308-3844. The examiner can normally be reached on Tuesday--Friday from 7:30 a.m. to 6:00 p.m..

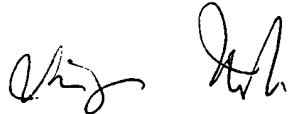
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mrs. Marian Knode can be reached on (703) 308-4311. The fax phone numbers for the organization where this application or proceeding is assigned are (703)

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872-9311 for regular communications and (703) 308-0651 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

V. Manoharan/dh  
September 24, 2002

  
VIRGINIA MANOHARAN  
PRIMARY EXAMINER  
ART UNIT 1764  
9/24/02